

AMENDMENTS TO THE CLAIMS

Please replace the claims as filed with the following list of claims.

Claim 1. An apparatus for the intensification of the production of high-viscosity oils which contains ~~the a unit of~~ for ultrasonic excitation of ~~the a~~ well bottom zone that consists of a surface ultrasonic generator and at least one ultrasonic magnetostrictive radiator placed at ~~the an~~ end of oil-well tubing (OWT), which are electrically connected with each other by two cords of a three-cord electrical cable, and ~~the a unit of the~~ for heating of OWT-oil well tubing that consists of a surface high-frequency generator and ~~the a line of for the OWT-oil well tubing heating~~, which is distributed along the entire length of OWT-oil well tubing and heats oil well tubing by high-frequency currents, said line including ~~the a~~ third cord of the three-cord electrical cable.

Claim 2. The apparatus of claim 1, wherein the unit ~~of the OWT heating the~~ for heating of oil well tubing includes a surface high-frequency generator on ~~the a daylight is surface, said high frequency generator being~~ electrically connected by a grounded wire to OWT-oil well tubing, which is electrically insulated from ~~the a~~ casing pipe of a well, and at ~~the place of the a~~ location of ~~the said~~ ultrasonic magnetostrictive radiator, the surface high-frequency generator is connected to OWT-oil well tubing by the third cord of the three-cord electrical cable.

Claim 3. An apparatus of claim 2, wherein the ultrasonic ~~magnetostrictive~~ magnetostrictive radiator ~~whose has an~~ inside diameter that matches the OWT-oil well tubing inside diameter.

Claim 4. An apparatus of claim 3, wherein the ultrasonic ~~magnetostrictive~~ magnetostrictive radiator is made in the form of a hollow cylinder or similar shape.

Claim 5. An apparatus of claim 1, wherein the ~~unit of the OWT-oil well tubing heating unit~~ includes one output of the surface high-frequency generator ~~is connected on the a daylight surface to a first one of the output[s]]~~ of the surface ultrasonic generator and ~~the one~~ cord of the three-cord electrical cable which is connected to this first output is a common cord for both generators, and ~~the a~~ second output of the surface high-frequency generator is connected by the third cord of the three-cord electrical cable at ~~the place of the location of the ultrasonic~~ magnetostrictive radiator, to ~~the said~~ common cord of said three-cord electrical cable.

Appl. No. 10/805,117

Docket No. 58012-011400

Amdt. dated December 7, 2004

Claim 6. An apparatus of claim 5, wherein ~~the said line of the~~ for OWT oil well tubing heating, by high-frequency currents, further contains at least two inductors placed on OWT oil well tubing and connected to ~~the said~~ third cord of the three-cord electrical cable.

Claim 7. An apparatus of claim 6, wherein the ultrasonic ~~magnetostrictive~~ magnetostrictive radiator ~~whose has an inside diameter that matches the an~~ OWT oil well tubing inside diameter.

Claim 8. An apparatus of claim 7, wherein the ultrasonic ~~magnetostrictive~~ magnetostrictive radiator is made in the form of a hollow cylinder or similar shape.

Claim 9. A method for intensification of production of high-viscosity oils, in which the viscosity of oil in the ~~a~~ well bottom zone is decreased by the effect applying of a high-power ultrasonic field on ~~it, said well bottom zone and~~ in addition, providing the heating of the well bottom zone, and maintaining the achieved decreased viscosity of oil during its transportation to the daylight surface through the heating of oil-well tubing (OWT) by high-frequency currents.

LA-FS1\311516\01\58012.011400